

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

		Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet)
Applicant's or agent's file reference see form PCT/ISA/220		<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. PCT/EP2004/050359	International filing date (day/month/year) 24.03.2004	Priority date (day/month/year) 25.03.2003
International Patent Classification (IPC) or both national classification and IPC D21F7/08		
Applicant VOITH FABRICS PATENT GMBH		

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office  
D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
Fax: +49 89 2399 - 4465

Authorized Officer

Helpiö, T.

Telephone No. +49 89 2399-7495



WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITYInternational application No.  
PCT/EP2004/050359

JC05 Rec'd PCT/PTO 23 SEP 2005

---

Box No. I Basis of the opinion

---

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
 This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
 a sequence listing  
 table(s) related to the sequence listing
  - b. format of material:  
 in written format  
 in computer readable form
  - c. time of filing/furnishing:  
 contained in the international application as filed.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/EP2004/050359

**Box No. II Priority**

1.  The following document has not been furnished:

copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).  
 translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2.  This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or  
industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-30
	No: Claims	
Inventive step (IS)	Yes: Claims	1-30
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-30
	No: Claims	

2. Citations and explanations

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

- 1 Reference is made to the following documents:  
D1: EP-A-0 987 366 (JWI LTD) 22 March 2000 (2000-03-22)  
D2: US-A-4 357 386 (LUCIANO WILLIAM A ET AL) 2 November 1982 (1982-11-02)  
D3: US-A-4 267 227 (SCHIHER STANLEY C ET AL) 12 May 1981 (1981-05-12)
- 2 The document D1 is regarded as being the closest prior-art to the subject-matter of claim 1, and discloses (cf. especially paragraphs [0024]-[0028]; claims) an industrial fabric according to the preamble of claim 1.

The subject-matter of claim 1 therefore differs from this known industrial fabric in that:

"during manufacture of the fabric a dispersion of particulate, polymeric material has been applied to the layer of batt of fibres and thermally activated to provide a discontinuous layer containing a mixture of batt fibres and a polymer-batt fibre matrix".

By applying the polymer material as a dispersion, the polymer particles remain discrete so that the polymer/fiber matrix structure remains permeable while improving surface smoothness, wear resistance and compaction resistance. The problem to be solved by the present invention may therefore be regarded as providing an alternative industrial fabric with improved properties.

In the industrial fabric according to D1, the polymer material is in the form of a porous film obtained by heating a layer of at least partially fusible powder material. There is no reference to a dispersion of particulate, polymeric material. The industrial fabric according to D2 consists of a textile base layer, an intermediate layer of polymeric resin foam particles and a covering layer of non-woven staple fibres. The layers have been attached to each other by needling and there is no reference to thermal activation. Document D3 discloses an industrial fabric coated by spraying a polymeric resin solution on the surface of the fabric. There is no indication in any of these documents that would lead the skilled person to combine

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.  
PCT/EP2004/050359

their teachings and thereby arrive to the subject-matter of claim 1. Therefore, claim 1 appears to satisfy the requirements of Article 33 PCT with regard to novelty and inventive step.

- 3 The subject-matter of claim 12 relates to a corresponding method of making an industrial fabric. Therefore, claim 12 appears to satisfy the requirements of Article 33 PCT with regard to novelty and inventive step as well.
- 4 Dependent claims 2-11 and 13-30 add further features to the independent claims and as such they also meet the requirements of the PCT with respect to novelty and inventive step.
- 5 The industrial applicability (Art. 33(4) PCT) of the present invention is evident.

\*\*\*\*\*